Progress Energy

March 28, 2012

Jocelyn G. Boyd, Esquire
Chief Clerk/Administrator
Public Service Commission of South Carolina
101 Executive Center Drive, Suite 100
Columbia, SC 29210

Re: Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc.
Power Plant Performance Report
Docket No. 2006-224-E

Dear Mrs. Boyd:

Enclosed is the Power Plant Performance Report for Carolina Power & Light Company d/b/a Progress Energy Carolinas, Inc. for the month of February 2012.

Sincerely,

Len S. Anthony (by dhs)

Len S. Anthony
General Counsel
Progress Energy Carolinas, Inc.

LSA/dhs
Attachment
45612

c: John Flitter (ORS)

Progress Energy Service Company, LLC
P.O. Box 1551
Raleigh, NC 27602

February 2012

The following units had no off-line outages during the month of February:

Brunswick Unit 2
Harris Unit 1
Mayo Unit 1
Roxboro Unit 2
Roxboro Unit 3
Roxboro Unit 4

February 2012

Brunswick Unit 1

Full Forced Outage

A) Duration: The unit was taken out of service at 23:19 on February 22, and remained offline for the balance of the month. At 04:00 on February 28, all repairs were complete, and the unit transitioned into reserve shutdown, awaiting the scheduled March refueling outage. The unit was offline for 124 hours and 41 minutes due to the forced outage.

B) Cause: The unit was manually scrammed after all Circulating Water Intake Pumps for the unit tripped due to high differential pressure across the Traveling Screens. Operations initiated the manual scram due to the loss of Circulating Water Pumps, and anticipated loss of Main Condenser vacuum.

C) Explanation: On February 22, a 4160V/480V step down transformer (Common C) overheated and tripped the incoming feeder breaker. Power was lost to all Demineralized Water Transfer Pumps for both units, all Unit 1 Circulating Water Intake Pump Traveling Screens, and multiple Unit 1 Circulating Water control and support systems. Both units entered Technical Specification LCO 3.0.3, which required commencing activities to shutdown both reactors. The loss of Demineralized Water Transfer Pumps caused a loss of Keepfill to Low Pressure ECCS systems. Keepfill was restored for both units, but Traveling Screens for Unit 1 remained impacted. As debris accumulated on the Unit 1 Screens, differential pressure rose, resulting in the loss of the Circulating Water Pumps. Operations initiated the manual scram.

D) Corrective Action: Unit 1 was taken to cold shutdown. Temporary power was established to critical Common C loads, Keepfill was restored, and LCO 3.0.3 was exited. The 4160V/480V Transformer to Bus Common C was replaced. The necessary repairs were completed, and the unit was available for restart at 04:00 on February 28, ending the forced outage period. The full investigation into the step down transformer overheating and resulting loss of Bus Common C continues, and is expected to be completed in April.

February 2012

Robinson Unit 2

Full Planned Outage

A. Duration: The unit officially transitioned from forced outage into the scheduled refueling outage at 0:00 on January 21, and was offline for the month of February. The unit was offline for 696 hours during the month.

B. Cause: Scheduled Refueling Outage

C. Explanation: The unit was taken out of service for a scheduled refueling outage. In addition to refueling, required maintenance and inspections are being carried out during this outage.

D. Corrective Action: Planned outage activities were in progress at the end of February.

	Month of February 2012		Twelve Month Summary		See Notes*
MDC	938	MW	938	MW	1
Period Hours	696	HOURS	8,784	HOURS	
Net Generation	451,924	MWH	8,017,003	MWH	2
Capacity Factor	69.22	%	97.30	%	
Equivalent Availability	81.97	%	96.50	%	
Output Factor	91.37	%	100.33	%	
Heat Rate	10,657	BTU/KWH	10,440	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	90,142	1.07	3
Partial Scheduled	0	0.00	60,654	0.72	4
Full Forced	121,566	17.91	121,566	1.45	5
Partial Forced	105,110	15.49	146,538	1.75	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	678,600		8,392,380		8

* See 'Notes for Fossil Units' filed with the January 2012 report.
** Gross of Power Agency

	Month of February 2012		Twelve Month Summary		See Notes*
MDC	932	MW	922	MW	1
Period Hours	696	HOURS	8,784	HOURS	
Net Generation	638,686	MWH	6,353,909	MWH	2
Capacity Factor	98.46	%	78.46	%	
Equivalent Availability	96.60	%	77.22	%	
Output Factor	98.46	%	98.11	%	
Heat Rate	10,517	BTU/KWH	10,582	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,207,546	14.64	3
Partial Scheduled	5,191	0.78	140,755	1.71	4
Full Forced	0	0.00	473,005	5.73	5
Partial Forced	19,411	2.93	130,737	1.58	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	663,288		8,250,372		8

* See 'Notes for Fossil Units' filed with the January 2012 report.
** Gross of Power Agency

	Month of February 2012		Twelve Month Summary		See Notes*
MDC	900	MW	900	MW	1
Period Hours	696	HOURS	8,784	HOURS	
Net Generation	654,589	MWH	8,148,300	MWH	2
Capacity Factor	104.50	%	103.07	%	
Equivalent Availability	100.00	%	99.98	%	
Output Factor	104.50	%	103.07	%	
Heat Rate	10,521	BTU/KWH	10,665	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	0	0.00	3
Partial Scheduled	0	0.00	323	0.00	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	8,377	0.10	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	651,456		8,090,064		8

* See 'Notes for Fossil Units' filed with the January 2012 report.
** Gross of Power Agency

	Month of February 2012		Twelve Month Summary		See Notes*
MDC	724	MW	724	MW	1
Period Hours	696	HOURS	8,784	HOURS	
Net Generation	-1,415	MWH	5,565,536	MWH	2
Capacity Factor	0.00	%	87.51	%	
Equivalent Availability	0.00	%	86.67	%	
Output Factor	0.00	%	100.23	%	
Heat Rate	0	BTU/KWH	10,861	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	527,568	100.00	727,680	11.14	3
Partial Scheduled	0	0.00	24,327	0.37	4
Full Forced	0	0.00	114,110	1.75	5
Partial Forced	0	0.00	107,503	1.65	6
Economic Dispatch	0	0.00	0	0.00	7
Possible MWH	527,568		6,533,832		8

* See 'Notes for Fossil Units' filed with the January 2012 report.

	Month of February 2012		Twelve Month Summary		See Notes*
MDC	735	MW	732	MW	1
Period Hours	696	HOURS	8,784	HOURS	
Net Generation	357,028	MWH	3,517,657	MWH	2
Capacity Factor	69.79	%	54.73	%	
Equivalent Availability ***	89.59	%	90.05	%	
Output Factor	69.79	%	63.76	%	
Heat Rate	9,816	BTU/KWH	10,716	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	365,278	5.68	3
Partial Scheduled	34,277	6.70	45,327	0.71	4
Full Forced	0	0.00	60,517	0.94	5
Partial Forced	18,951	3.70	169,656	2.64	6
Economic Dispatch	101,304	19.80	2,011,712	31.30	7
Possible MWH	511,560		6,426,960		8

* See 'Notes for Fossil Units' filed with the January 2012 report.
** Gross of Power Agency
*** Tornado damage in April 2011 resulted in lower than expected Equivalent Availability for Mayo 1. Excluding the effects of the tornado damage would result in 12 month ending February 2012 EA = 91.69.

	Month of February 2012		Twelve Month Summary		See Notes*
MDC	667	MW	665	MW	1
Period Hours	696	HOURS	8,784	HOURS	
Net Generation	354,687	MWH	2,838,435	MWH	2
Capacity Factor	76.40	%	48.60	%	
Equivalent Availability	99.35	%	70.93	%	
Output Factor	76.40	%	68.92	%	
Heat Rate	10,080	BTU/KWH	10,236	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	1,686,103	28.87	3
Partial Scheduled	2,987	0.64	7,103	0.12	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	38	0.01	4,720	0.08	6
Economic Dispatch	106,519	22.95	1,299,608	22.25	7
Possible MWH	464,232		5,840,628		8

* See 'Notes for Fossil Units' filed with the January 2012 report.

	Month of February 2012		Twelve Month Summary		See Notes*
MDC	698	MW	696	MW	1
Period Hours	696	HOURS	8,784	HOURS	
Net Generation	316,026	MWH	3,443,332	MWH	2
Capacity Factor	65.05	%	56.33	%	
Equivalent Availability	95.86	%	91.71	%	
Output Factor	65.05	%	63.26	%	
Heat Rate	10,245	BTU/KWH	10,876	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	425,920	6.97	3
Partial Scheduled	8,863	1.82	13,820	0.23	4
Full Forced	0	0.00	30,619	0.50	5
Partial Forced	11,243	2.31	37,606	0.62	6
Economic Dispatch	149,676	30.81	2,161,575	35.36	7
Possible MWH	485,808		6,112,932		8

* See 'Notes for Fossil Units' filed with the January 2012 report.

	Month of February 2012		Twelve Month Summary		See Notes*
MDC	711	MW	706	MW	1
Period Hours	696	HOURS	8,784	HOURS	
Net Generation	334,361	MWH	3,755,957	MWH	2
Capacity Factor	67.57	%	60.60	%	
Equivalent Availability	99.17	%	98.84	%	
Output Factor	67.57	%	61.65	%	
Heat Rate	10,201	BTU/KWH	10,797	BTU/KWH	

	MWH	% of Possible	MWH	% of Possible	
Full Scheduled	0	0.00	16,752	0.27	3
Partial Scheduled	4,088	0.83	4,719	0.08	4
Full Forced	0	0.00	0	0.00	5
Partial Forced	0	0.00	49,986	0.81	6
Economic Dispatch	156,407	31.61	2,370,273	38.24	7
Possible MWH	494,856		6,197,844		8

* See 'Notes for Fossil Units' filed with the January 2012 report.
** Gross of Power Agency

Run Date 3/16/2012

Plant	Unit	Current MW Rating	January 2011 - December 2011	February 2012	January 2012 - February 2012
Asheville	1	196	54.69	37.99	18.12
Asheville	2	187	49.04	60.75	59.89
Cape Fear	5	148	45.42	5.31	15.70
Cape Fear	6	175	41.91	10.53	11.45
Lee	1	80	30.76	0.00	3.35
Lee	2	80	16.71	0.00	2.16
Lee	3	252	47.30	16.77	19.76
Mayo	1	735	55.15	69.79	70.74
Robinson	1	179	36.44	17.43	19.14
Roxboro	1	374	54.46	66.60	55.29
Roxboro	2	667	44.58	76.40	73.21
Roxboro	3	698	58.89	65.05	62.53
Roxboro	4	711	62.16	67.57	62.17
Sutton	1	98	27.49	8.76	20.73
Sutton	2	107	25.79	7.90	12.50
Sutton	3	397	34.10	26.18	27.95
Weatherspoon *	1	49	4.64		
Weatherspoon *	2	49	12.73		
Weatherspoon *	3	79	18.74		
Fossil System Total		5,261	48.18	51.42	49.51
Brunswick	1	938	100.14	69.22	85.79
Brunswick	2	932	78.63	98.46	100.28
Harris	1	900	102.89	104.50	104.54
Robinson Nuclear	2	724	100.34	0.00	26.80
Nuclear System Total		3,494	95.21	71.71	82.26
Total System		8,755	66.40	57.63	60.69

* The Weatherspoon units were retired in September 2011; however, the 2011 data is included for historical reference.

Amended SC Fuel Rule
Related to Nuclear Operations

There shall be a rebuttable presumption that an electrical utility made every reasonable effort to minimize cost associated with the operation of its nuclear generation system if the utility achieved a net capacity factor of ≥ 92.5% during the 12 month period under review. For the test period March 1, 2011 through February 29, 2012, actual period to date performance is summarized below:

Period to Date: March 1, 2011 to February 29, 2012

Nuclear System Capacity Factor Calculation (Based on net generation)

A.. Nuclear system actual generation for SCPSC test period	A =	28,084,748 MWH
B. Total number of hours during SCPSC test period	B =	8,784 hours
C. Nuclear system MDC during SCPSC test period (see page 2)	C =	3,482 MW for 2011 3,494 MW for 2012
D. Reasonable nuclear system reductions (see page 2)	D =	3,082,960 MWH

A. SC Fuel Case nuclear system capacity factor: [(A + D) / (B + C)] * 100 = 101.8%

NOTE:
If Line Item E > 92.5%, presumption of utility's minimum cost of operation.
If Line Item E < 92.5%, utility has burden of proof of reasonable operations.

Amended SC Fuel Rule
Nuclear System Capacity Factor Calculation
Reasonable Nuclear System Reductions
Period to Date: March 1, 2011 to February 29, 2012

Nuclear Unit Name and Designation	BNP Unit # 1	BNP Unit # 2	HNP Unit # 1	RNP Unit # 2	Nuclear System
Unit MDC (March - December 2011)	938 MW	920 MW	900 MW	724 MW	3,482 MW
Unit MDC (January - February 2012)	938 MW	932 MW	900 MW	724 MW	3,494 MW
Reasonable refueling outage time (MWH)	0	966,549	0	727,680	
Reasonable maintenance, repair, and equipment replacement outage time (MWH)	254,082	801,495	1,318	115,281	
Reasonable coast down power reductions (MWH)	3,604	5,579	0	0	
Reasonable power ascension power reductions (MWH)	19,741	69,344	0	16,432	
Prudent NRC required testing outages (MWH)	5,874	49,467	322	23,653	
SCPSC identified outages not directly under utility control (MWH)	0	0	0	0	
Acts of Nature reductions (MWH)	10,756	11,541	0	242	
Reasonable nuclear reduction due to low system load (MWH)	0	0	0	0	
Unit total excluded MWH	294,057	1,903,975	1,640	883,288	
Total reasonable outage time exclusions [carry to Page 1, Line D]					3,082,960